

## SAT Report for Case # P-18-0118

### General

<b>Report Status:</b>	Complete	<b>Status Date:</b>	02/22/2019
<b>CRSS Date:</b>	03/05/2018	<b>SAT Date:</b>	03/06/2018
<b>Consolidated PMN?</b>	Y	<b>SAT Chair:</b>	William Irwin
<b>Consolidated Set:</b>	P-18-0119		
<b>Submitter:</b>	H.B. Fuller Company		
<b>CAS Number:</b>	[REDACTED]		
<b>Ecotox</b>	[REDACTED]		
<b>Related Cases:</b>	[REDACTED]		
<b>Health</b>	[REDACTED]		
<b>Related Cases:</b>	[REDACTED]		
<b>Chemical Name:</b>	[REDACTED]		
<b>Use:</b>	[REDACTED]		
	industrial adhesives		Consolidated Set
	P-18-0118-19.		[REDACTED]
	[REDACTED]		
<b>Trade name:</b>	None		
<b>PV</b>	30000.00		
<b>Max (kg/yr):</b>			
<b>Ecotox Assessor:</b>	Muneer, Alie	<b>Fate Assessor:</b>	Lee, WenHsiung
<b>Health Assessor:</b>			Surapureddi, Sailesh

**Physical  
Chemical Information**

<b>Molecular Weight:</b>	<b>Physical State - Neat:</b>	
<b>Percent 500:</b>	<b>Percent 1000:</b>	
<b>Melting Point (Measured):</b>	<b>Melting Point (est):</b>	<b>MPD (EPI):</b>
<b>Vapor Pressure:</b>	<b>Vapor Pressure (est):</b>	<b>VP (EPI):</b>
<b>Water Solubility:</b>	<b>Water Solubility (EST):</b>	<b>Water Solubility (EPI):</b>
<b>Log Kow:</b>	<b>Log P Comment:</b>	<b>Log Kow (EPI):</b>

**SAT Concern**

<b>Ecotox Rating (1):</b>	<b>Ecotox Rating Comment (1):</b>	
<b>Ecotox Rating (2):</b>	<b>Ecotox Rating Comment (2):</b>	
<b>Health Rating (1):</b>	<b>Health Rating Comment (1):</b>	Concerns for sensitization, irritation and uncertain concerns for lung surfactancy
<b>Health Rating (2):</b>	<b>Health Rating Comment (2):</b>	

**PBT  
Ratings**

Persistence	Bioaccumulation	Toxicity	Comments
1	1	1	PMN
3	1		Hyd Pdt

**Exposure N**  
**Based Review**  
**(Health)?**  
**Exposure Based N**  
**Review**  
**(Ecotox)?**  
 SAT Sens Irr  
**Keywords:** Lung-U

**Fate Assessment P-18-0118-19**

**Summary:** FATE: MW = [REDACTED] with [REDACTED] < 500 and  
 [REDACTED] < 1000  
 [REDACTED] with MP < 25 °C (E)  
 S = Reacts

Hydrolysis half-life = min-hr  
 VP < 1.0E-6 torr at 25 °C (E)

BP > 400 °C (E)  
 H < 1.00E-8 (E)  
 POTW removal (%) = PMN  
 90-99 via hydrolysis; then Hyd Pdt 90 via sorption  
 Time for complete  
 ultimate aerobic biodeg = Hyd Pdt > mo  
 Sorption to soils/sediments  
 = Hyd Pdt v.strong  
 PBT Potential: PMN P1B1; Hyd Pdt P3B1  
 \*CEB  
 FATE: Migration to ground water = Hyd Pdt negl

**Removal in 90-99;90**  
**WWT/POTW**  
**(Overall):**

Condition	Rating Values	Comment
	w/ Rating Description	
WWT/POTW	;3	
Sorption:		
WWT/POTW	;4	
Stripping:		
Biodegradation	;4	
Removal:		
Biodegradation		
Destruction:		

Condition	Rating Values w/ Rating Description	Comment
Aerobic Biodeg Ult:	;4	
Aerobic Biodeg Prim:		
Anaerobic Biodeg Ult:	;4	
Anaerobic Biodeg Prim:		
Hydrolysis (t1/2 at pH 7,25C) A:	1-2	-N=C=O
Hydrolysis (t1/2 at pH 7,25C) B:		
Sorption to Soils/Sediments:	;1	
Migration to Ground Water:	;1	Hyd Pdt negl
Photolysis A, Direct:		
Photolysis B, Indirect:		
Atmospheric Ox A, OH:		
Atmospheric Ox B, O3:		

## Health Assessment

**Health Summary:** Absorption with reaction all routes:  
absorption of the parent polymer is NIL all routes and poor all routes for the low MW fractions based on p-chem. There are concerns for irritation and sensitization due to the isocyanate groups. There is an uncertain concern for lung surfactancy due to the polyether repeat units if they are in the low MW fractions.

**Routes of** Dermal Drinking  
**Exposure:** Water Inhalation

## Test Data Submitted

Test Data Submitted:
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## Ecotox Assessment

Test organism	Test Type	Test Endpoint	Predicted	Measured	Comments
Fish	96-h	LC50	*		*=no effects at saturation; [REDACTED]
Daphnid	48-h	LC50	*		*=no effects at saturation; [REDACTED]
Green Algae	96-h	EC50	*		*=no effects at saturation; [REDACTED]
Fish	-	Chronic Value	*		*=no effects at saturation; [REDACTED]
Daphnid	-	Chronic Value	*		*=no effects at saturation; [REDACTED]
Green Algae	-	Chronic Value	*		*=no effects at saturation; [REDACTED]

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Aquatic:				Because hazards are not expected up to the

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
<b>Chronic Aquatic:</b>				water solubility limit, acute and chronic concentrations of concern are not identified. Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

<b>Ecotox</b> No <b>Route of releases to water Exposure?</b>
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Factors	Values	Comments
<b>SARs:</b>	Nonionic Polymers	
<b>SAR Class:</b>	Nonionic polymers-insoluble-isocyanate	
<b>TSCA NCC Category?</b>	None	

## Recommended Testing

### Ecotox Value Comments

with [REDACTED]; MW [REDACTED] with [REDACTED] <500 and [REDACTED] <1000; [REDACTED] with an unknown MP (P); S = [REDACTED] (P), reacts (M); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO<sub>3</sub>; and TOC <2.0 mg/L.

### Ecotox Factors Comments

Environmental Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risk because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA estimated environmental hazard of this new chemical substance using predictions based on the [REDACTED] water solubility of P-18-0118 ([REDACTED])

nonionic polymer; MW [REDACTED] with [REDACTED] % < 500 and [REDACTED] % < 1000). Acute and chronic toxicity values estimated for fish, aquatic invertebrates, and algae are all no effects at saturation. These toxicity values indicate that the new chemical substance is expected to have low environmental hazard. Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

#### Environmental Risk: Risks

to the environment from acute and chronic exposure are not expected at any concentration of the new chemical substance soluble in the water (i.e., no effects at saturation).